## JOINT ANALYSIS IN THE "DECISION AGE"



**INDUSTRIAL AGE** 

**INFORMATION AGE** 

**DECISION AGE** 

Vince Roske Deputy Director, J8

## EMERGENT THEMES IN DEFENSE ANALYSIS

1. MANAGE ANALYSES TO BETTER SERVE
AND SHAPE THE "DEFENSE DEBATE".

(BECOME PROACTIVE, COLLABORATIVE, AND STEADY STATE)

2. PROVIDE ANALYSIS SUPPORT TO THE FULL NATIONAL MILITARY STRATEGY.

(2/3 OF STRATEGY IS POORLY SUPPORTED BY ANALYSIS)

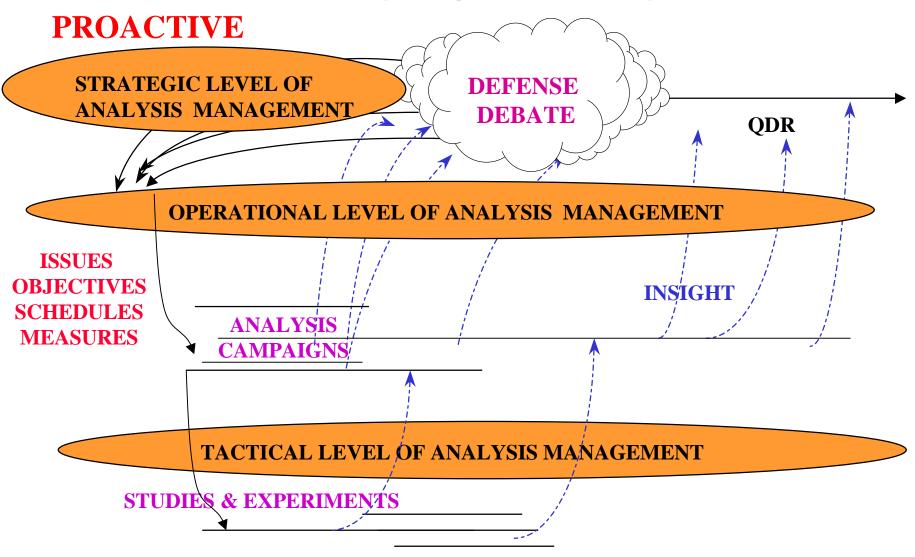
3. IMPROVE THE EFFECTIVENESS AND EFFICIENCY OF JOINT STUDIES.

(USE AN ANALYSIS RECIPE)

4. EXPLOIT TECHNOLOGY TO IMPROVE ANALYSIS RESPONSIVENESS.

(BECOME "DECISION AGE" ANALYSTS)

# 1. IMPROVING ANALYSIS MANAGEMENT



### 2. ANALYSIS SUPPORTING THE MILITARY STRATEGY



# 3. IMPROVING EFFICIENCY & EFFECTIVENESS

### THE ANALYSIS RECIPE

-WHAT'S THE QUESTION?

GAMING

-WHAT'S THE REAL QUESTION?

VISUALIZATION

- -WHAT DO THE FINAL SLIDES LOOK LIKE?
- -WHAT DO WE ALREADY KNOW?

DATA MINING

-HOW DO WE GET THE MISSING INFORMATION?

TOOLS

### 4. EXPLOITING TECHNOLOGY

ISSUES ARE EXTREMELY COMPLEX AND DYNAMIC.
-CANNOT HUSBAND IN ONE PLACE ALL THE
EXPERTISE NEEDED TO BE COMPETENT.

(OUTREACH & COLLABORATION IS REQUIRED)

TRADITIONAL M&S CANNOT KEEP PACE WITH THE COMPLEXITY OR THE DYNAMICS (MODEL & WORLD)

(NEW, FAST, METHODS, TOOLS & SKILLS ARE NEEDED)



-WHAT DOES IT MEAN TO DO ANALYSIS

IN THE "INFORMATION AGE"?

IN THE "DECISION AGE"?

### CHARACTERISTICS OF DECISION AGE ANALYSIS ORGANIZATIONS

- •PRODUCE PROACTIVE ANALYSIS.
- •APPLY CURRENT AND EVOLVING INFORMATION.
- •FOCUS ON "TOTAL SYSTEM" BEHAVIOR.
  - POLITICAL, SOCIAL, ECONOMIC, MILITARY
  - "SYSTEM BEHAVIORS" INCLUDE:
    - HISTORY, TRENDS, EMERGENT BEHAVIOR
    - UNINTENDED/UNEXPECTED CONSEQUENCES
- EMPOWER AGILITY.
  - IN THINKING
  - •IN METHODOLOGY
  - •IN ORGANIZATION AND SKILLS.

## NEW ANALYSIS FUNCTIONS & MANNING

- •CURRENT INFORMATION ACCESS
  - **•OPEN SOURCE THE WEB**
  - •CLASSIFIED INTEL
  - •INFORMATION RESEARCH SUPPORT
- •DATA MINING CAPABILITY
- •FAST QUANTITATIVE ANALYSIS TECHNIQUES
- •COGNITIVE AND SUBJECTIVE ANALYSIS METHODS.
- •KNOWLEDGE MANAGEMENT PROCESSES

**OPERATED BY:** 

- •WEB TECHNICIANS / SURFERS
- LIBRARY SCIENTISTS
- •GRAPHICS ANALYSTS
- •SOCIO SYSTEMS ANALYSTS
- •KNOWLEDGE MANAGERS
- •ORSAs

## JOINT ANALYSIS ACTIVITIES

### **CATEGORY I** (RECURRING HIGH PAYOFF TO J8)

- A. STUDIES MANAGEMENT (VALUE, FOLLOW UP)
- **B. STUDIES DESIGN SUPPORT (COLLABORATION)** 
  - --"ICON" STUDIES DATA BASE
  - -- "GAME/ANALYZE/GAME" METHODOLOGY

### **CATEGORY II** (CLEAR PAYOFF FOR JOINT ANALYSIS)

- C. DATA MINING
  - -- ENGAGEMENT, RESPONSE
- D.. VIRTUAL INFORMATION CENTERS
  - --COLLABORATIVE EXPERTISE / ACCESS
- E. INFLUENCE DIAGRAMMING
  - -- RATIONALE FOR PREPARATION OF OPEN SOURCE
  - -- ENGAGEMENT & RESPONSE ANALYSIS.
- F. FAST TOOLS (SUBJECTIVE & VISUALIZATION & SIMULATION)

#### **CATEGORY III** (POTENTIAL FOR HIGH PAYOFF-INVESTIGATE)

- G. DOCUMENT ANALYSIS
  - -- ISSUES IDENTIFICATION
- H. COMPLEX ADAPTIVE SYSTEMS ANALYSIS METHODOLOGY
- I. LPs FOR FORCE; OPS CONCEPTS; C4ISR TRADEOFFS